# A/C & Refrigeration Training Systems

Educational Training Equipment for the 21st Century

Bulletin 234-2E



MODEL H-RST-5A (Shown with CDL Option and H-RST-DMB Option) Dimensions: 66"H x 34"W x 31"D Shipping Weight: 575 lbs

## **Options**

**H-RST-5A-CDL** Refrigeration and Air Conditioning Trainer with Computer Data Logging package

Model H-RTS-1 Refrigeration Tool & Spare Parts Set

Model H-RST-DMB Digital Manifold with Bluetooth

## H-RST-5A Refrigeration and Air Conditioning Trainer

The Hampden **Model H-RST-5A** Refrigeration and Air Conditioning Trainer is a thermostatic expansion valve (TEV) controlled refrigerating system which provides the basic facilities for studying the principles, mechanics and maintenance aspects of industrial refrigeration systems.

The **H-RST-5A** consists of a mobile demonstration carrier with base and hermetic compressor mounting frame and an instrument/control panel. Gauges read evaporation and condensing pressures, while strategically located temperature wells permit temperature measurements. The lower portion of the workbench houses the evaporator with its fan, permitting the compressor to cycle based on evaporating pressure. The trainer is provided with faulted components which the instructor can temporarily install in place of the functioning components. The fault system includes: Air Flow Restrictor, Deflection Shield, TEV-Faulted Orifice, TEV-Faulted Screen, and Faulted Filter-Drier. The **H-RST-5A** is R-134a based and is completely factory assembled and tested. It comes complete with operating instructions, a student experiment manual, and a teacher's manual.

## Manual

A student manual includes the following topic areas:

- System Components
- System Operation and Performance
- Refrigeration Cycle
- Pressure Enthalpy Charts
- Compressors
- Refrigerant Control Device (TEV)
- Electric Circuits and Controls
- Pressure Controls
- System Charging and Servicing

#### Experiments

- Familiarization with the H-RST-5A
- The Refrigeration Cycle
- Deflected Evaporator Air Flow
- Restricted Evaporator Air Flow
- High Pressure Protection
- Low Pressure Protection

Power required: 120V AC 1Ø 60Hz

All Hampden units are available for operation at any voltage or frequency





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